



**Australian Government**

**Department of Education, Employment and Workplace Relations**

# **AHCNSY301A Maintain nursery plants**

**Release: 1**

## AHCNSY301A Maintain nursery plants

### Modification History

Not Applicable

### Unit Descriptor

<b>Unit descriptor</b>	This unit covers the work undertaken to maintain nursery plants and defines the standard required to: calculate daily water needs; recognise stages of plant growth; monitor plant health; integrate range of plant maintenance activities; monitor the effects of plant interventions; prepare, mix and use chemicals as required.
------------------------	---

### Application of the Unit

<b>Application of the unit</b>	This unit applies to the process of monitoring and maintaining plants in a retail or production nursery.
--------------------------------	--

### Licensing/Regulatory Information

Not Applicable

### Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
-----------------------------	--

## Elements and Performance Criteria Pre-Content

Not Applicable

## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>

ELEMENT	PERFORMANCE CRITERIA
1. Monitor and maintain the nursery environment	1.1. Environmental parameters are monitored against the needs of the plants and enterprise guidelines. 1.2. Environmental parameters are altered, as required, to meet the needs of nursery plants and market requirements. 1.3. Irrigation system components are serviced for basic operational use and basic user serviceable parts are repaired or replaced.
2. Determine daily water requirements	2.1. Water requirements are determined according to the needs of the plant and environmental parameters. 2.2. Water is applied according to the needs of the plant group. 2.3. Water requirements of the plant are monitored according to enterprise guidelines.
3. Promote plant growth by intervention	3.1. Potting media is tested in production areas to ensure quality specifications are met. 3.2. Health of the plant is monitored according to enterprise guidelines. 3.3. Plant interventions are undertaken according to marketing plans, appropriate stage of plant growth for the particular intervention, and Occupational Health and Safety (OHS) requirements. 3.4. Waste is disposed of with full consideration of the environmental implications. 3.5. Records are kept on all maintenance activities according to enterprise requirements.

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- select, fit and use appropriate personal protective equipment
- calculate daily water needs
- recognise stages of plant growth
- monitor plant health
- integrate range of plant maintenance activities

**REQUIRED SKILLS AND KNOWLEDGE**

- monitor the effects of plant interventions
- prepare, mix and use chemicals as required
- service basic irrigation system components
- repair or replace user serviceable irrigation components
- interpret and record required workplace information
- operate irrigation systems
- use oral communication skills/language competence to fulfil the job role as specified by the organisation, including questioning techniques, active listening, clarifying information and consulting with supervisors as required
- use interpersonal skills to work with and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities.

**Required knowledge**

- effects of environmental parameters on plant growth
- methods of calculating daily water needs
- relationship between plant water needs and environmental parameters
- characteristics of various types of potting media
- factors affecting the growth of nursery plants
- optimum growing conditions for a range of plants in a nursery
- quality parameters for a range of nursery plants
- symptoms of unhealthy plants
- common problems that occur with nursery plants and their treatment
- botany and plant physiology
- effect of different pruning and intervention methods
- processes for modifying environmental parameters
- phenological stages of plant growth
- treatments required by plants at different phenological stages and environmental parameters
- principles and operations of a range of irrigation systems used in nurseries
- OHS hazards and the associated risks when maintaining plants
- environmental impacts of applying plant interventions
- Nursery Industry Water Management Best Practice Guidelines 2005.

## Evidence Guide

<b>EVIDENCE GUIDE</b>	
The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.	
<b>Overview of assessment</b>	
<b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b>	<p>The evidence required to demonstrate competency in this unit must be relevant to workplace operations and satisfy holistically all of the requirements of the performance criteria and required skills and knowledge and include achievement of the following:</p> <ul style="list-style-type: none"> <li>• calculate daily water needs</li> <li>• recognise stages of plant growth</li> <li>• monitor plant health</li> <li>• integrate range of plant maintenance activities</li> <li>• monitor the effects of plant interventions</li> <li>• prepare, mix and use chemicals as required.</li> </ul>
<b>Context of and specific resources for assessment</b>	Competency requires the application of work practices under work conditions. Selection and use of resources for some worksites may differ due to the regional or enterprise circumstances.

## Range Statement

<b>RANGE STATEMENT</b>	
The range statement relates to the unit of competency as a whole.	
Plants may include:	<ul style="list-style-type: none"> <li>• a wide range of plants common in production and retail nurseries and commonly used and produced in the region.</li> </ul>
Plant cultural practices may include:	<ul style="list-style-type: none"> <li>• practices relevant to maintenance activities in diverse environments and a varying ability to control the environmental parameters.</li> </ul>
Plant physiological processes may include:	<ul style="list-style-type: none"> <li>• principles of transpiration, water intake, nutrient uptake, photosynthesis, respiration and translocation.</li> </ul>

**Unit Sector(s)**

<b>Unit sector</b>	Nursery
--------------------	---------

**Co-requisite units**

<b>Co-requisite units</b>		

**Competency field**

<b>Competency field</b>	
-------------------------	--